No.10-2005 MONTHLY ENSO DISCUSSION FOR MICRONESIA AND AMERICAN SAMOA

December 2005

The Pacific ENSO Applications Center (PEAC) disseminated the forth quarter newsletter. The Climate Prediction Center (CPC) stated the following in its December 8, 2005 ENSO Diagnostic Discussion (refer to http://www.cpc.ncep.noaa.gov): "By the end of November, equatorial SST anomalies greater than +0.5°C were restricted to the region between Indonesia and 170°E, while negative anomalies less than -0.5°C were observed at most locations between 145°W and the South American coast." Over the last month, stronger-than-average low-level equatorial easterly winds occurred over the central Pacific. At the same time, convection and surface pressures were near normal over the same area. As a result, the CPC concludes: "Collectively, the present oceanic and atmospheric anomalies are consistent with a trend toward La Niña conditions in the tropical Pacific.

The latest climate forecast models continue to range from weak El Niño conditions to weak La Niña conditions into mid-2006, indicating uncertainty in the forecasts. However, stronger-than-average low-level equatorial easterly winds over the central Pacific and decreasing SSTs over the eastern and central Pacific do not support development of El Niño. In fact CPC states that "they support either a continuation of ENSO-neutral conditions or the development of weak La Niña conditions during the next 6-9 months.

At this time, it appears that rainfall patterns, tropical cyclone development and movement patterns, and sea level behavior should be "relatively normal" for Micronesia and American Samoa. If La Niña conditions develop and persist, rainfall over Micronesian islands equatorward of 9°N could be wetter than normal as the trade wind trough intensifies. In addition, tropical cyclone activity will shift to the west, reducing the threat to Micronesia and American Samoa. Stronger-than average trade winds could also cause a rise in western Pacific sea levels.

We do not see any extended periods of dry weather significant enough to cause drought conditions on any of the Micronesian or American Samoan islands.

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Coordinated with the Climate Prediction Center and the Pacific ENSO Applications Center.